Half Billion Business in Detroit Next Year

More Than Seven Hundred Thousand Automobiles Will Be Shipped for 1916, Is Estimate of Motor Maker.

IT WAS \$300,000,000 FOR YEAR ENDED JUNE 30

DETROIT, Mich., July 31.—Three hundred million dollars represents the automobile business done in Detroit last year, according to the Government indicated an analysis of the control of t year, according to the Government industrial census takers who have just
completed their work here. While officlal announcement will be made in
Washington \$380,000,000 is a conservative figure according to a United States
official in touch with the work. This
amount is for the year ended June 30
and is just five times the industry's
scal for the preceding twelve months. and is just five times the industry's
total for the preceding twelve months.
In a public statement made this week,
B. F. Toblin, president of the Continental Motor Manufacturing Company, declared that the automobile business in for the year just etarting will \$500,000,000 and that more than 700,000 motor cars will be shipped

This includes the accessory business which is proving so important. The Continental is spending \$500,000 in additional buildings and equipment. The Paige-Detroit Company is spending a like sum and the Hudson Motor Car Company will have spent \$1,000,000 when the improvements under way are completed. In addition to these Henry

completed. In addition to these Henry Ford has just spent more than \$2,000, 000 for land alone for tire and equip-ment factories in addition to the big plant for his tractor engine building. Eighty-five per cent. of the automobiles to be produced in 1916 will be of the four cylinder type. Of this large majority 75 per cent. will be of the Lmajority 75 per cent. will be of the Lhead type—that is to say, as opposed to
the so-called contrasting type. The four
cylinder motor, for many reasons, is
still the most efficient and simple for
all the practical purposes of motor or
propulsion. Gear ratios play a very important role in the perfect torque obtained at slow speeds. A high speed
multiple cylinder engine in connection
with low gear ratios is a combination

that will cause the average motorist

types are often employed for high speed or racing purposes, when the cost of oper-ation and loss of efficiency, due to long wear, is incidental to winning an event. But for long life and practical results.

in the hands of the average driver, the T or L head motor stands first in the estimation of the world's greatest de-It is the prediction of those who have

made a close study of the subject that the four cylinder engine will continue to be the popular choice of both manufacturer and consumer. They base their predictions on the fact that the four

Does it look well?
Does it sit well?
Does it ride well?
Does it dodge well in traffic?
Does it climb well?
Does it hold well on the down hill?
Does it sound well? Does it make the most of its fuel?

Does it keep cool?

Does it save tires and avoid wear?

Does it feel good to ride in it?
Does it give all its passengers equal

Is it priced right?

Is the company behind it strong and capable of backing its guarantee? The following letter from Secretary of the Navy Josephus Daniels to Cal. Samuel P. Colt, president of the United States Rubber Company, proves that the Navy Department appreciates the recent move of the United States Rubber Company which aims to aid in the forming of an adequate national defence for the United States. Col. Colt believes that a great many large corporations will follow the lead of his company and encourage their employees to join the militia of the various States. The importance of the United States Rubber Company's action will be appreciated when it is realized that there are more than 55,000

realized that there are more than 55,000 rubber company employees.

minded men are beginning to realize the importance of military and naval service that will cause the average motors that will cause the average motors and any anxious moments.

Of the four cylinder types the T-head or L-head motor is recognized by the majority of engineers to be the most practical and economical. Contrasting practical and economical. Contrasting the strengthening of the national defence, and the reported manifestation of pariotics are often employed for high speed ism shown by your company in allowing

your employees to serve in the militia without loss of pay and without loss of their regular annual leave receives the unqualified approval of the Navy Departmen Very respectfully, Josephus Daniels. This man Ford who got all the first page publicity in the Becker case was, much to the regret of Highland Park,

In the City of Akren, Ohio, alone facturer and consumer. They base their predictions on the fact that the four cylinder engine has proved itself to be efficient and that from an economic standpoint it has no superiors.

J. J. Cole, president of the Cole Motor Car Company, has a new catechism for infore than the City of Akron, Ohio, alone, more than one million postal cards, showing a birdney view of the factory of The B. F. Goodrich Company the past year. The sale of the picture of the factory exceeded that of any other postal card of any other city view by Car Company, has a new catechism for infore than twenty-five times.

\$500 BONUS OFFERS FOR 'TWIN SIX' DELIVERIES

Ciodio & Engs. Inc., United States repre-sentatives and manufacturers of the Hou-datile shock absorber, have just received an order from the Mercer Automobile Com-pany for Houdaille equipment on their 1916 Packard Co. Finds That the Intending Customers Are Getting Very Eager.

There will be an impressive infusion

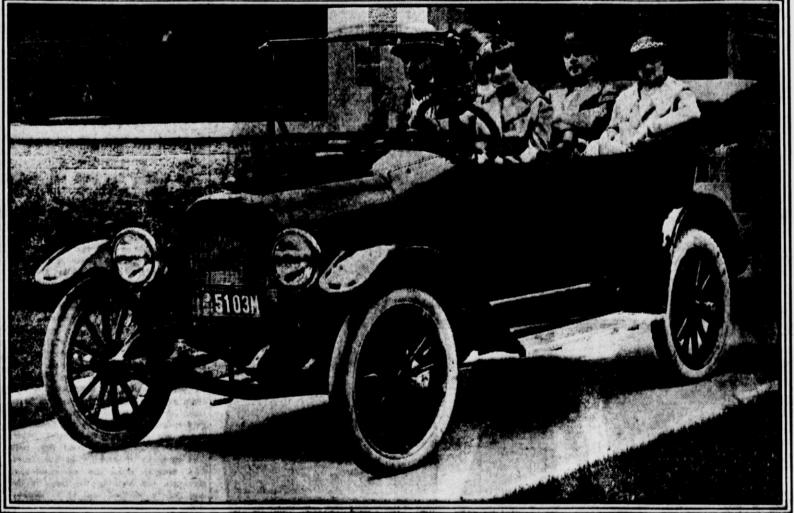
There will be an impressive infusion of new blood into the ranks of Packard motor car owners as a result of the development and introduction of the plant to take care of the 3,500 production of the "Twin Six" models, according to A. C. was a solution in the northern peningular of Michigan, twenty-six distributers and officials of the Jackson Automobile Company rolled into Jackson on Sunday, July 11, after a convention in the north woods.

Since leaving the Jackson factory a reek before the dealers composing the urty had travelled close to 1,000 miles er every sort of road from concrete hway to corduroy tote trails; had wit ted the performance in the proposition of the proportion of intending purchasers who have never owned Fack-ards is surprisingly large," he said on Friday. "In seasons past a large part of our output has gone into the hands of persons who already were Packard of the Six' has tapped an entirely new reserve of road from concrete hway to corduroy tote trails; had wit the dater to the cordinary of the surprising to the cord of the surprising to the cord of the surprising to the proportion of intending purchasers who have never owned Fack-ards is surprisingly large," he said on Friday. "In seasons past a large part of our output has gone into the hands of persons who already were Packard of the world." "Alfred O. Dunk of Detroit, Mich., former pany in New York which acts as distributer for the Overland, Peerless and Willys-Knight line of cars, is authority for this statement, and he says that all the proportion of intending purchasers who have never owned Fack-ards is surprisingly large," he said on Friday. "In seasons past a large part of our output has gone into the hands of persons who already were Packard of the World." "In seasons past a large part of our output has gone into the hands of persons who already were Packard of the world." Alfred O. Dunk of Detroit, Mich., former pany in New York which acts as distributed for the big company in New York which acts as distributed for the big company in New York which acts as distributed for the big company in New York which acts as distributed for the statement, and he says that all the proportion of the Auto Parts Company of Detroit is the case of the York which acts as distribu



its eight cylinder car. The company be-fun the manufacture, a year ago, of a type of car entirely new to the Ameri-

MAXWELL PRICE LOWER; NO RADICAL CHANGE



The latest of the 1916 models it, automobiles has just reached New York,
it is the Maxwell. The tendency to reduce price among automobile manufacturers generally the coming season is
emphasized by the new Maxwell. With
complete equipment, including electric
starter and electric lishits, the five passcarter to not read the complete of the production
of the conting model is priced at \$655.

There is no radical change mechanical
restricts not earlier to not display the complete of the success of their product would not be so
marked if each new model represented a
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pany for roughless and the started the manufacture of this article here and it will now be a standard article on the American market.

saving device appears simply as a bumper, the fender feature being concealed within.

Automobile manufacturers and tire makers are now working successfully to the same result—the prolongation of motor car service. The motorist used to feel it necessary to change his car every year. This was not merely a fad. Care wore out more rapidly then. The same motorist thought himself lucky to get a couple of thousand miles out of a tire. Now a car is satisfactory on the average for three years, and he buys his tires on twice the mileage basis that once contented him.

Cars are being built lighter in weight, with a resultant economy in the use of tires, their mileage extending in proportion as the weight they carry is reduced. Hence it is promised that most cars now being bought will be good for five years of satisfactory service, with a minimum of tire costs.

The Empire Rubber and Tire Company of Trenton. N. J., did two years ago for the longevity of the tire what manufacturers are now striving to do for the automobile. The big pioneer step was the adoption of red rubber for tires. This innovation resulted from the company's experience that red rubber applied to uses where strength was imperative, such as rubber bands, rubber hose, rubber bottle stoppers, rubber surgical goods, developed exceptional toughness and resistance. It therefore presented itself as the ideal material of which to make the automobile tire that would last longest in service.

Processes were designed of a kind to safeguard and augment the toughness, resiliency and durability of red rubber. It was cured with an absence of free sulphur so as to minimise its heat conducting capabilities. The tread was made extra thick.

The first completed red rubber tires were victously tested in comparison with the Empire company's own gray rubber tires, the ordeal including granding on the tires.

Notes of Live Interest to the

Motor Trade, Local and Foreign

European reliability runs last year.

The Studebaker announcement that in its 1916 line would be a four cylinder, seven passenger touring car to sell for considerably less than \$1,000 was a distinct surprise to automobile manufacturers. An additional surprise has been the portion of local motor car enthusiasts when the car began demonstrating its ability. With its 40 horse-power motor F. R. Bump, Studebaker's New York branch manager, was quite willing to put it to any test in "working out" the machine on New York streets and in the suburbs. The test which evoked the most applause was the case with which the Studebaker four climbed Abbey Hill on high.

Abbey Hill is the New York testing ground par excellence. The Studebaker four was driven on up. The entire time the car was in high, and the 40 horse-power motor never betrayed distress. Fort George hill was negotiated with the same case. The six cylinder Studebaker was put through the same paces and with its 50 horse-power motor naturally did everything that the four cylinder car was called upon tade.

thing. No extras have to be purchased to make the car complete.

Mansbach says he found business conditions all over the country excellent. In every city and town he visited factories were running full time and many working two and three shifts. Throughout the Middle West the crops are the biggest in the country's history. This alone will have a tendency to create a demand for higher priced cars.

Arthur R. Pardington, vice-president of the Lincoln Highway Association, who died last Widnesday in Detroit, was a man who was very prominently identified with motor racing affairs in this country from the earliest days. He mansged the Vanderbilt cup races on Long Island from the start and also acted as an official at many other contests of importance. Pardington was a good organizer in the initial cost of automobiles will be lower the country excellent. In every city and town he visited factories were running full time and many made and drivers and passengers up to the full complement of the car will be admitted free.

Last Friday Nancy Hanks visited the site of once famous horse track—not Nancy Hanks (Mrs. Austin K. Hanks) of the making of an automobile have advanced the price of his car \$100. Several complete laps at high speed, the value of better than eighty miles an hour. Owing to the fact that the outside edges of the turns are not complete, and becial at many other contests of importance. Fardington was a good organizer and detail man and handled a great mass of work in a competent way. He had many friends in this vicinity, it goes without saying. The building of the Long Island Motor Parkway was one of his works and by it he will be remembered hereabout.

It was a couple of years ago that he became associated with the Lincoln Highway plan and at it he worked assiduously. He travelled all over the country, addressing boards of trade and like organizations to tell them about the highway. His health, never of the best

Express Car Delivery Is Plan Used by Harry S. Houpt.

HUDSON 48 HOUR SERVICE.

The spectacular increase in the sale of Hudson cars in the New York territory in the past two months means much more than the mere success

much more than the mere success of the car.

Harry S. Houpt, president of the Hudson Motor Car Company of New York, Inc., has not hesitated to bring cars through by express rather than to disappoint the customer in view of inadequate freight shipments.

Forty-eight hour guaranteed delivery on all Six-Forty Hudson phaetons is the Hudson slogan these days.

HUPP CAR A CLIMBER. Lee Anderson Tests Its Worth on

His Own Private Tout.

Advices from Lee Anderson, sales and advertising manager of the Hupp Motor Car Company, who has been touring the East in one of the new 1916 Hupmobiles, indicated that the new model "N" is a wonder as a hill climber. Anderson, accompanied by his wife and Mr. and Mrs. J. T. H. Mitchell of Chicago, left Buffalo a week ago Sunday, touring through the Mohawk Valley to Albany and up to Saratoga Springs. From Saratoga Springs the party took in the beautiful Berkshires, with its many and difficult hills, through to Boston by way of Pittsfield. The ocean was followed out of Boston, up to Maine, where they entered the Maine woods, going to Poland Springs and from Poland Springs into the White Mountains to Bretton Woods, from where they they came

"The Hupmobile model 'N' certainly is a wonder as a hill climber," Anderson wired to President Drake. "The way it took even the worst hills was wonderful. It has all the power necessary for even the most difficult climb. It simply ran away from cars of much greater price on the mountainous roads. Have not had the slightest trouble and the 'N' did everything our engineering department has claimed. The company

FORD CARS REDUCED.

ed a mon- be sold at a further reduction in prices year, has in mind eve ument or marker of appropriate design which is about the same as they actually attention to Pardington's work to make the highway a realization.

which is about the same as they actually cost those who participated in the is said that the plans are for a production of as many as 400,000 cars.

MOTOR PARADE TO THE SPEEDWAY

Opening of Formal Practice at Sheepshead Set for September 18.

PRIZES FOR VARIOUS CARS

By way of a curtain raiser to the throwing open of the Sheepshead Bay Speedway for formal practice for the inaugural 350 mile race on October 2 there will be a parade of automobiles from Central Park and through Brooklyn to the two mile motor racecourse by the sea.

This inaugural procession will be ducted by the Motor Club, Inc., of New York, in whose membership Automobile row is very generally represented. Arrangements for the parade are already under way by President S. S. Toback, W. C. Poertner, C. H. Larson and E. C. J. McShane and other directors and members of the club. The date set is Saturday, September 18.

Roughly the Motor Club's plan is to have the parade form at an uptown

have the parade form at an uptown point at 1 o'clock that afternoon, proceed down town and cross one of the East River bridges over a route and to a rendezvous to be determined later, where the procession will be joined by the Brooklyn contingent for the run to Into the White Mountains to Bretton
Woods, from where they they came
down out of the mountains into Concord
and back to Boston, where they arrived
last Sunday. Mr. Anderson drove to
Cape Cod, Providence and New York
and returned by way of Albany and
Syracuse to Buffalo.

"The Hupmobile model 'N' certainly
"The Hupmobile model 'N' certainly
"The Hupmobile model 'N' certainly and view the events from the grand

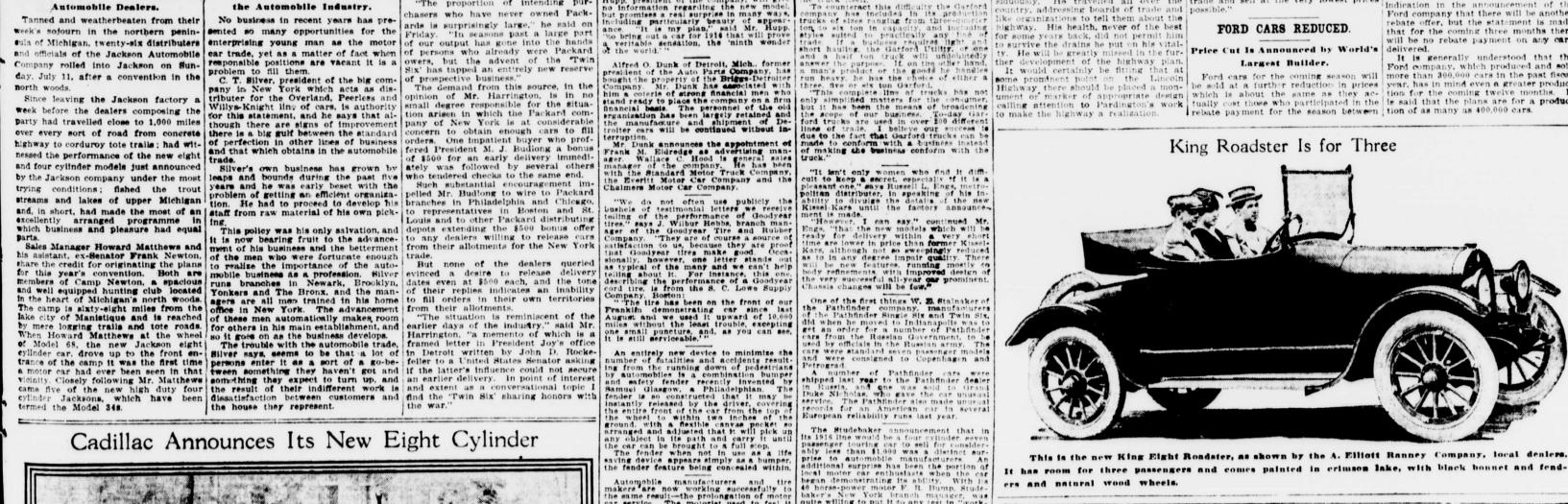
stand without charge. The general public not participating in the parade will be almitted to the grand stand and grounds at an admission fee to be an-nounced later and to obtain throughout the practice for the elimination trials scheduled for September 24, 25 and 26. Practice that day will be confined to those who have actually entered for the race, thus giving the public a first chance

Ford company that there will be another rebate offer, but the statement is made that for the coming three months there the furally plan.

Price Cut Is Announced by World's delivered.

Ford cars for the coming season will more than 300,000 cars in the past fiscal

King Roadster Is for Three



has room for three passengers and comes painted in crimson lake, with black bonnet and fenders and natural wood wheels.

"SUN" READERS' TOURING QUERIES ANSWERED

questions in to the Automobile Editor, THE SUN, 150 Nassau Street. It will facilitate answering if all questions are in by Thursday evening. The Touring Bureau of the Automobile Club of America is cooperating with THE SUN in furnishing this information. Suggestions and infort ation will be welcomed.)